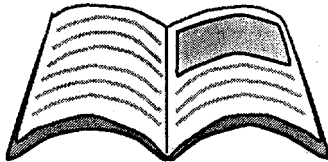
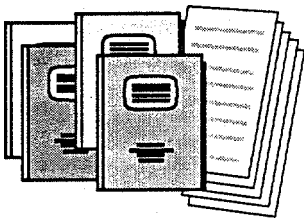


Service Quality Management Systems: An Annotated Bibliography

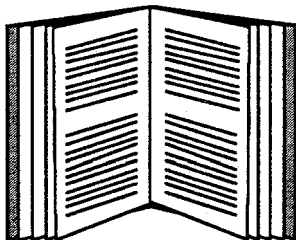
Wilbert R. Young

Reviewed by
Hal Rosen



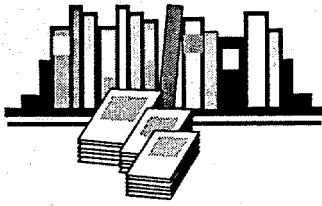
Approved and released by
Delbert M. Nebeker
Director, Organizational Systems Department

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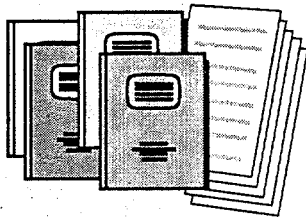
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3. ABSTRACT (Maximum 200 words) <p>This bibliography is intended to provide a resource for those interested in gaining an introduction to the area of service quality management systems. Service quality management systems are concerned with optimizing the customer-supplier quality relationship to the benefit of both parties. That is, by meeting and exceeding the customers' expectations, the supplier may gain a competitive advantage. The literature cited in this bibliography underscores this customer-supplier relationship.</p> <p>The materials cited in this effort include (1) theoretical models, (2) empirical analyses, (3) case studies, and (4) description of techniques and guidelines, which are intended to optimize the relationship between the supplier and the customer.</p>				
4. SUBJECT TERMS Service management, customer feedback, customer satisfaction, service quality, customer expectation, customer-supplier relationship, partnership, customer needs, market research			15. NUMBER OF PAGES 37	
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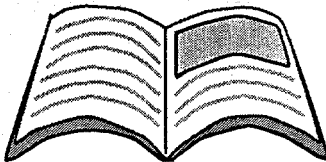
Foreword

This effort was conducted under reimbursable work unit 99CO OMR-0009 and sponsored by the Sacramento Army Depot.

This bibliography is intended to provide a resource for those interested in gaining an introduction to the area of service quality management systems. Service quality management systems are concerned with optimizing the customer-supplier quality relationship to the benefit of both parties. That is, by exceeding customers' expectations, the supplier may gain a competitive advantage. Organizations successfully implementing quality efforts understand that to effectively achieve their mission, they must view their operations from their customers' perspective. The literature cited in this bibliography underscores this customer-supplier quality relationship.

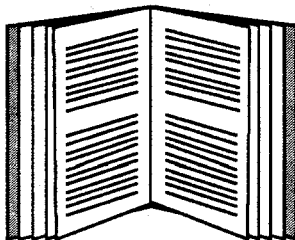


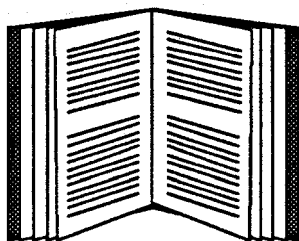
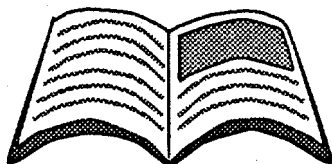
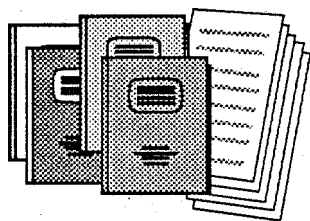
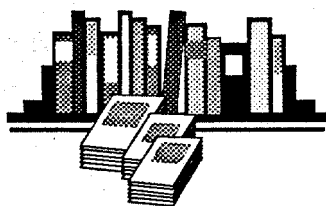
The materials cited in this effort include (1) theoretical models and approaches, (2) description of techniques, (3) empirical analyses, and (4) case studies, which are intended to optimize the relationship between the supplier and the customers, and, in turn, to improve the service quality provided to customers.



Abstracts of each article, book, and report contain summary descriptions of the major ideas and a listing of major points discussed. For each book and report a table of contents is provided. At the end of each abstract, the relevant key words are listed. A key word index follows the bibliography.

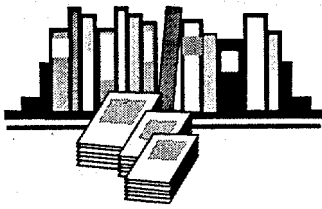
DELBERT M. NEBEKER
Director, Organizational Systems Department





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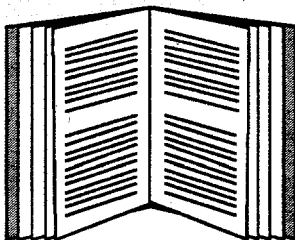
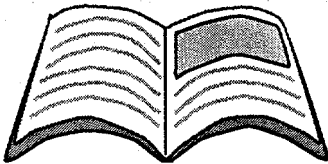
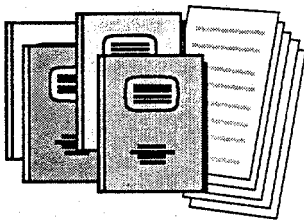


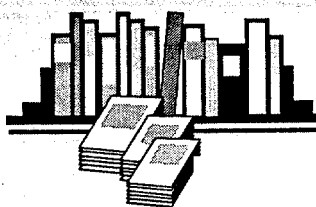
Introduction

This report contains an annotated bibliography of articles, books, and reports, which address issues related to service **quality** management systems.

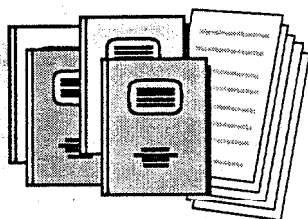
The annotated bibliography covers the following subject areas:

- Theoretical Models and Approaches
- Description of Techniques
- Empirical Analyses
- Case Studies





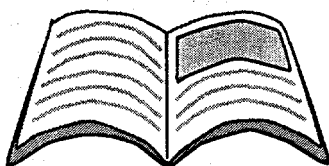
organizations have perceived that service quality is important to long-term competitive success. This section will introduce different frameworks to clarify customer-supplier quality perceptions.



Backaitis, N., & Rosen, H. H. (June 1990). *Managing for organizational quality-theory and implementation: An annotated bibliography* (NPRDC-TN-90-25). San Diego: Navy Personnel Research and Development Center.

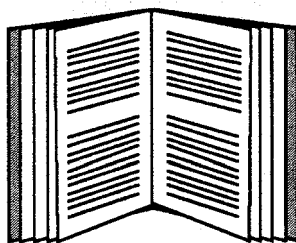
Key Words: Customer-supplier relationship, partnership, alliances

Abstract: Section VIII of this report concentrates on the relationship between customers and suppliers. Abstracts from several articles and papers are presented.



The authors cited in this section argue that the traditional, adversarial relationship between customer and supplier impedes efforts to improve organizational quality and productivity. A closer, more cooperative relationship between the two should improve the competitive positions of both.

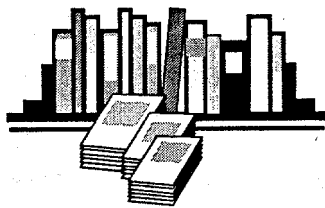
Cooperation between customer and supplier does not mean a relationship based on instantaneous trust. These readings describe the cooperative relationship as one that evolves over time, accompanied by a greater level of understanding between customer and supplier of each other's needs and capabilities and with a decreasing need for extensive verification.



Band, W. (February 1989). *Quality: I know it when I see it. Sales and Marketing Management in Canada*, 33(2), 36-38.

Key words: Customer expectations, customer needs

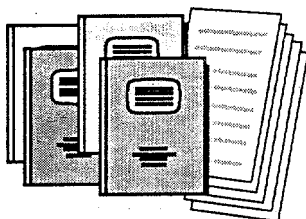
Abstract: Operational definitions for quality are suggested and discussed. Ultimately this article contends that exceeding customers' expectations, at an acceptable cost, is the real target for quality improvement programs.



Berry, L. L., Zeithaml, V. A., & Parasuraman, A. (Summer 1990). Five imperatives for improving service quality. *Sloan Management Review*, 31(4), 29-38.

Key words: Customer service, service quality, customer expectations

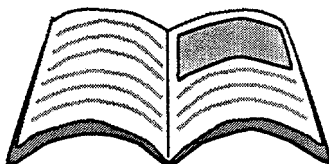
Abstract: How do you meet customers' expectations? In this article the authors attempt to answer a fundamental question: What must every company interested in improving customer service do to actually improve it? The authors suggest implementing the five service imperatives: define the service role, compete for talent (and use it), emphasizing service teams, go for reliability, and be great at problem resolution.



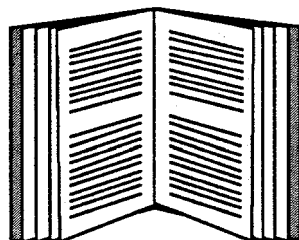
Bowen, D. E., Siehl, C., & Schneider, B. (1989). A framework for analyzing customer service orientations in manufacturing. *Academy of Management Review*, 14(1), 75-95.

Key words: Service quality, service orientation, services marketing, product strategy, business models, organizational behavior, customer behavior, customer needs, customer analysis

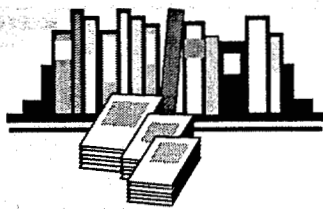
Abstract: Bowen et al. propose a novel question: What are the implications of applying a service orientation to manufacturing firms? This paper explores this question by developing a conceptual framework that adapts customer service orientations to traditional manufacturing firms.



The proposed framework is based upon the emerging research on the relationship between service quality and product strategy. This body of research stresses the following key points for companies to get and maintain a competitive advantage: (1) Value-added service provided by the company is one way of transforming customer-perceived undifferentiated products. (2) Customer service is a critical determinant of customer's perception of product quality, and in the long run, the company's level of performance. (3) Service-support systems may be viewed not only as a basis of competitive advantage but also as a requisite basis to even compete or enter the specific business or industry.



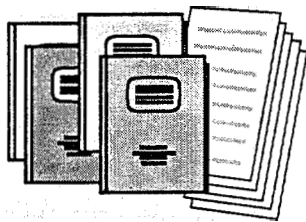
As a result, the authors' proposed framework includes the following elements to obtain service-oriented goals (e.g., customer responsiveness and high customer contact): (1) inculcate service-related climate and culture, (2) include customer data in assessing organizational effectiveness, (3) integrate production and marketing functions, (4) establish relational markets, (5) recognize



the importance of intangibles, (6) evaluate interpersonal skills of customer contact personnel, (7) use unobtrusive control mechanisms at organization/customer interface, and (8) manage customer participation in design, production, delivery and consumption.

The authors discuss the need for future research.

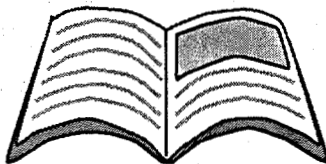
Bowick, K. W., & Vuckovic, A. G. (1986). Management of quality in design and product introduction. *International Conference on Communications*, 1, 692-695.



Key words: Product quality, customer needs, management information

Abstract: This paper deals with two techniques for information management through the product development/delivery cycle. These are "gating" and "feedback." Gating is the process of reviewing at critical points in the cycle a snap shot of all information related to a product. Feedback is the mechanism of using experience to achieve continual improvement in products, development processes, and technologies.

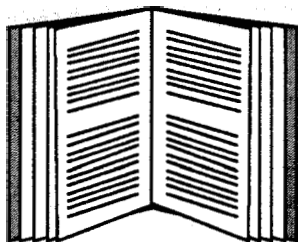
Brewer, L. T. (March 1989). Customer needs and quality of service. *Telecommunications Policy*, 13(2), 2-9.



Key words: Service quality, customer requirements, deregulation

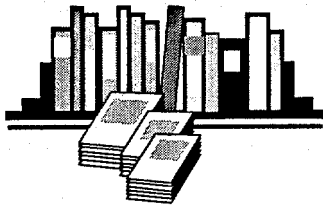
Abstract: This article discusses specific dimensions related to the issue of customer needs and quality of service in the telecommunications industry. Dimensions identified are customer operational requirements, new technology, access costs and charges, and the impact of deregulation. Brewer suggests a course of action for both the telecommunication industry and for customers.

Brown, M. B. (January 1988). Defining quality in service businesses. *Quality*, 27, 56-59.



Key words: Service quality

Abstract: Operational definition of quality service for service-oriented business is discussed. The discussion focuses on three primary indicators of service quality: accomplishments, behavior, and product.



Cary, M., Kay, B., Orleman, P., Robertshaw, W., Ross, G., Saunders, D., Wallace, W., & Wittenbraker, J. (June 1987). The customer window. *Quality Progress*, 20(6), 37-42.

Key words: Market research, consumer, organizational development, customer-based quality

Abstract: A model for combining market research, quality control, and organizational development to design products and services is presented. Shehart's plan-do-check-act (PDCA) construction is incorporated within the model.

Craig, S. R. (July-August 1990). How to enhance customer connections. *The Journal of Business Strategy*, 2(4), 22-26.

Key words: Customer orientation, customer perspective, customer relation, product development

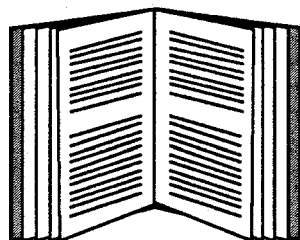
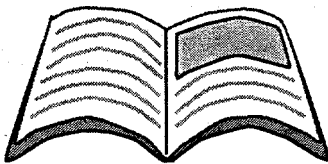
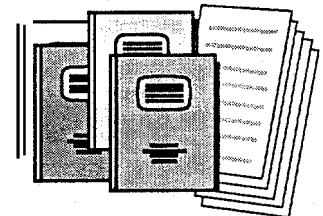
Abstract: An integrated process to enhance critical linkages model is suggested as a useful basis to manage the important ties among the functional areas within an organization and between the organization and its customers. These critical linkages comprise three broad areas: "customer links and interfaces, internal operational interfaces, and linkages within the product or process development arena." Brief business examples to support the need for the author's model are presented.

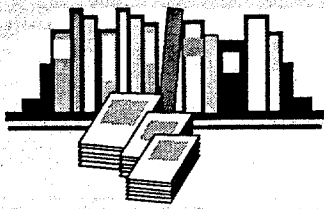
Davidow, W. H., & Uttal, B. (1989). *Total customer service: The ultimate weapon*. New York: Harper & Row Publishers.

Key words: Customer service, service quality, customer satisfaction, market research

Abstract: Davidow and Uttal, building upon the theoretical concepts of Levitt (1980), have redefined customer service to mean "all features, acts, and information that suggest the customer's ability to realize the potential value of a core product or service." This definition offers several possible advantages: "It covers traditional customer service activities, such as handling complaints, but it also embraces many newer types of service, such as the microprocessor that tracks the performance of a car and informs the owner when service is needed. It covers the spectrum of customer service from designing a product for easy maintenance to offering attractive salvage terms for products that are past their useful lives.

... Another advantage of this definition is that it underlines an important trait of customer service: It's a moving





target. . . . A company seeking to win through superior customer service constantly has to create new and different ways of enabling customers to realize value.

Finally, this definition concentrates on the value of products and services as they are used. All too many companies, when developing customer services, never bother asking customers what they expect. Not surprisingly, the services they provide often do nothing to raise customer satisfaction, and many even undermine it.

The authors, drawing upon in-depth case histories of successful and unsuccessful business leaders, offer a six-point plan that, if implemented systematically, will improve most companies service quality. The plan consists of developing a service strategy, leadership by example, personnel policies, designing services using customer input, constructing and implementing a customer service infrastructure, and continuous measurement.

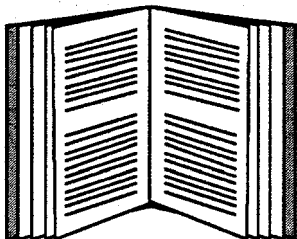
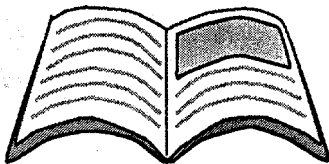
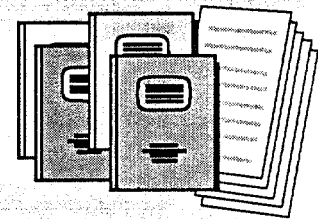
The authors' conclude that:

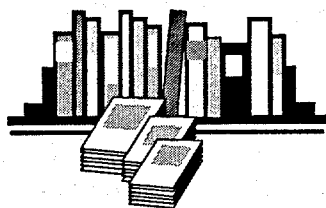
. . . companies that provide outstanding service don't do it by dumb luck. They manage to do it. They put into action the six-point customer service plan. . . . They trounce their competitors by spending more effort and money on service, and by spending them in smarter ways. They spoil customers not from altruism but purely out of self-interest. By leading customers to expect ever better service, and by exceeding those expectations, they build strong customer loyalty. In the same way they make less able competitors look worse and worse and lose more and more business.

Day, G. S. (1990). *Market driven strategy: Processes for creating value*. New York: The Free Press.

Key words: Competitive advantage, market-driven, customer value, customer needs, strategic planning

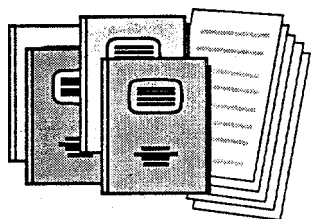
Abstract: The basic proposition of this book is that there is a "need for a forward-looking competitive strategy, that specifies how a business intends to compete in its chosen markets." Furthermore, the author proposes that this new strategy should reflect the positive aspects of both analytical top-down command and incremental bottom-up participation mode strategic planning. The integrated approach recommended by Day is called adaptive planning.





The adaptive planning approach contains the three necessary ingredients required to adapt to changing and ambiguous markets.

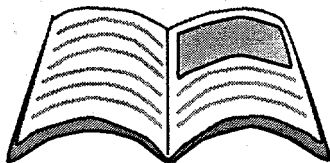
The first is a strategic vision or theme that articulates the nature of the business and focuses the energies of all parts of the organization toward the task of outperforming the competition. The second ingredient is a market orientation in which the beliefs and values that pervade the organization emphasize the need to put the customer first. Finally, a successful business needs a robust process for formulating and choosing the best strategy in light of the issues facing the business.



DeCarlo, N. J., & Sterett, W. K. (March 1990). History of the Malcolm Baldrige National Quality Award. *Quality Progress*, 23(3), 21-27.

Key words: Quality award, quality measurement

Abstract: The authors describe the impetus for and development of the National Quality Award. From the initial concerns by government and business leaders over the U.S.'s ability to increase productivity and compete for world markets, President Reagan signed legislation authorizing a national study on productivity in October 1982. The outcome of the study led to the Malcolm Baldrige National Quality Improvement Act in August 1987.

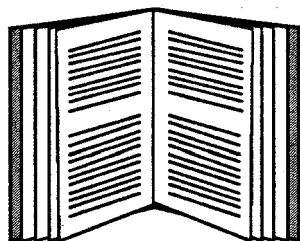


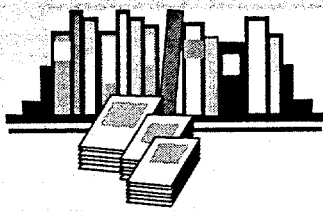
The article concisely traces the award program, as managed by the National Institute of Standard and Technology (NIST), from 1987 through the Award's 1989-90 criteria judging and administration improvement cycle. As of 1990, the Award has evolved into seven examination categories: leadership, information and analysis, strategic quality planning, human resource utilization, quality assurance of products/services, quality results, and customer satisfaction.

Eureka, W. E., & Ryan, N. E. (1988). *The customer driven company: Managerial perspectives on QFD*. Dearborn, MI: American Supplier Institute, Inc.

Key words: Quality function deployment, customer requirements, product design, Taguchi methods

Abstract: This book is for those people interested in a basic understanding of Quality Function Deployment (QFD). "What it will tell you is what America's QFD pioneers think and have learned



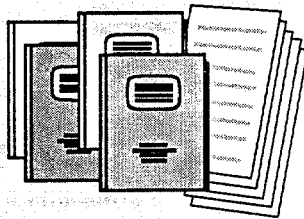


about the methodology; what QFD basically is, involves and does; and how, where and when QFD can best be utilized.”

Foster, M., Whittle, S., & Smith, S. (December 1989). A total quality approach to customer service. *Training and Development Journal*, 43(12), 55-59.

Key words: Service quality, total quality service (TQS)

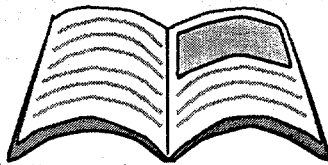
Abstract: Many companies attribute customer-service problems to front-line employees with poor interpersonal skills: they may train employees to be friendlier, but do nothing to change organizational cultures and systems. From Britain comes an innovative new approach, based on total quality principles, that weaves service quality into the fabric of the organization.



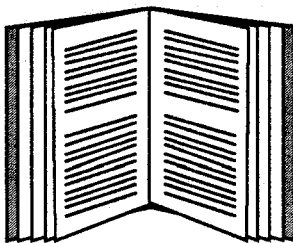
Gummeson, E. (Winter 1988). Service quality and product quality combined. *Review of Business*, 9(3), 14-19.

Key words: Quality, service quality, product quality

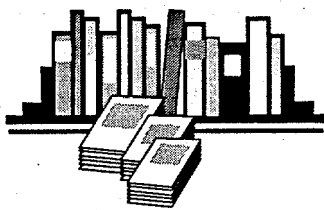
Abstract: Gummeson offers a timely proposition given America's increasing shift from a manufacturing-oriented management philosophy to a growing importance for service management and marketing. This proposition is that it is time to integrate quality thinking from products with services. The body of the article lends support to this proposition.



Initially, quality is redefined from a strict product or service orientation to an operational definition that incorporates both: “customer-perceived quality--quality is in the eye of the customer.” Customer-perceived quality, according to Gummeson, “is a blend of objective facts and subjective judgments, of knowledge as well as of ignorance.”



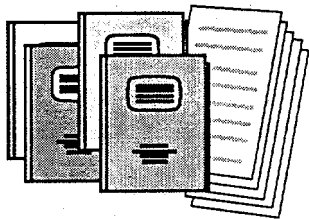
He points out that current service quality research is based upon identifying unique service-oriented models or blindly applying a product-oriented model to the service sector. As examples, he overviews three approaches: direct application of quality know-how from products to services, models of determinants of service quality, and gap analysis. The computer software industry is used as an example of the joint importance of product and service quality on customer satisfaction.



Guaspari, J. (1988). *The customer connection: Quality for the rest of us*. New York: American Management Association.

Key words: Customer satisfaction, quality customer needs, customer expectations

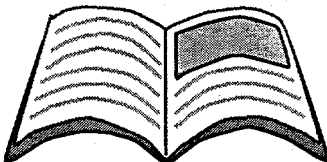
Abstract: This book has two dominant themes: (1) All employees in an organization must understand the critical link between knowing the customer and product or service quality, and (2) by creating a company-wide customer focus, it's possible to integrate your quality efforts and to realize that quality is the presence of value rather than the absence of defects.



Holpp, L. (October 1989). Achievement motivation and kaizen. *Training and Development Journal*, 43(10), 53-63.

Key words: Kaizen, customer requirements

Abstract: Some people claim that Japan's competitive advantage is a cultural or genetic phenomenon--that a U.S. company cannot successfully replicate the Japanese concept of kaizen (i.e., continuous improvement). But achievement-motivation training can create a kaizen-like consciousness that is entirely in keeping with American values and norms.



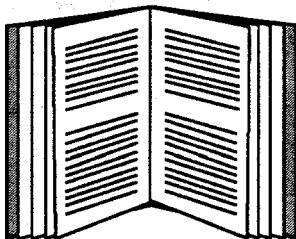
Langevin, R. G. (Winter 1988). Service quality: Essential ingredients. *Review of Business*, 9(3), 3-5.

Key words: Service quality, customer needs

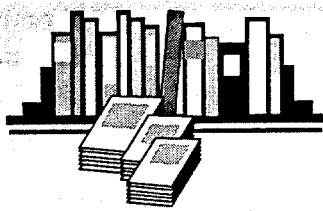
Abstract: About three-quarters of American workers are now employed in the service industry or service-oriented businesses. This article explores the critical need for business to understand the expectations and needs of their customers.

Lyons, T. F., Krachenberg, A. R., & Henke, J. W., Jr. (Spring 1990). Mixed motive marriages: What's next for buyer-supplier relations? *Sloan Management Review*, 31(4), 29-36.

Key words: Customer-supplier relationship



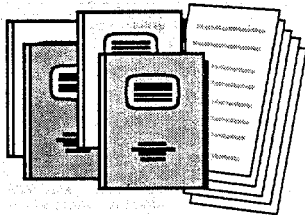
Abstract: U.S. companies and their suppliers are supplanting the traditional "arm length" style of customer (buyer)-supplier relationship with an emerging style characterized by increased interdependence, team decision making, longer-term contracts, etc. Generally, buyers are perceived to be in the drivers seat. This article explores that perception in detail.



Parasuraman, A., Zeithaml, V. A. & Berry, L. L. (Fall 1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.

Key words: Service quality, customer service, customer satisfaction

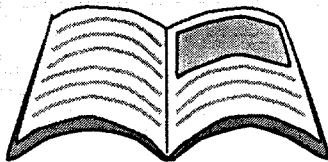
Abstract: In general, quality in tangible goods has been described and measured by marketers, quality in services remains ill-defined and measured. This paper attempts to investigate this situation by discussing the data gathered from extensive exploratory studies of quality in four service businesses and by developing a model of service quality.



Reichheld, F. F., & Sasser, W. E., Jr. (September-October 1990). Zero defections: Quality comes to services. *Harvard Business Review*, 105-111.

Key words: Customer feedback, customer satisfaction, service quality

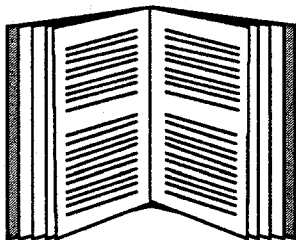
Abstract: The authors discuss logical, business-oriented reasons why companies should put serious effort in assessing why customers stop using their products or services. Defection analysis, as the authors call it, will help business executives: (1) identify the costs associated with losing a customer versus recruiting a customer, (2) predict profit swings, (3) identify specific reasons why a customer switched to a competitor, (4) identify customers' behaviors that both drive your economics and gauge customer loyalty or long-term commitment, and (5) ultimately, to use information gathered from defectors to improve the business.



Reip, R. W. (March 1988). Make the most of customer complaints. *Quality Progress*, 21(3), 24-25.

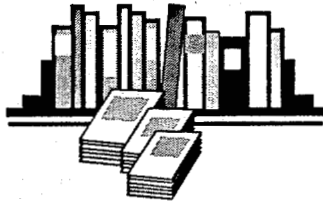
Key words: Customer complaints, customer satisfaction

Abstract: This article discusses how quality professionals can capitalize on customers' complaints to improve quality.



Schnaars, S. P. (1991). *Marketing strategy: A customer-driven approach*. New York: The Free Press.

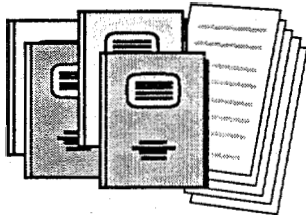
Key words: Market strategy, consumer research, customer satisfaction, competitive advantage, service quality, product quality



Abstract: This book is about reorienting strategy from a marketing perspective. Schnaars proposed that "...a focus on competitors." A consumer focus or a competitor focus along is not a viable strategy for a **firm** to secure a competitive advantage.

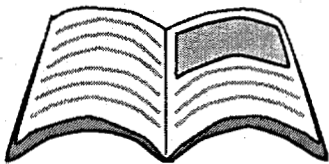
The author explores his basic proposition by initially presenting a historical perspective on marketing strategy. This is followed by a discussion on some of the empirical findings of market strategy affects on profits. Subsequent chapters in the book focus on the interface between assessing customer satisfaction and competitor information. Finally, leading to the conclusion that:

The trend in customer satisfaction is akin to the trends sweeping other areas of marketing. As marketers move from the more micro, psychological perspective of consumer satisfaction to the more macro, strategic view of product performance and product quality, they take a different view of consumers. Consumers are still the key focus of marketers. But today it is a more strategic view of customer satisfaction that dominates. That trend can be expected to continue.



Stralkowski, C. M., Klemn, R. C., & Billon, S. A. (Autumn 1988). Partnering strategies: Guidelines for successful customer-supplier alliances. *National Productivity Review*, 7(4), 308-317.

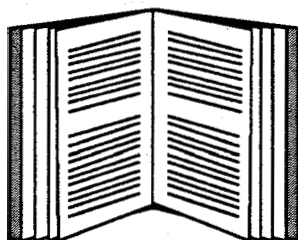
Key words: Partnering, customer-supplier relationship, partnership

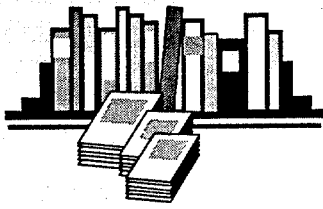


Abstract: Partnering, as defined by the authors, is any process in which two or more companies cooperate to an unusually high degree to achieve their separate but complementary objectives. Stralkowski et al. argue that partnering is advantageous for both customer and suppliers. It can lead to increased sales, mutual improvements, higher trust, and mutual breakthroughs. But the authors point out that partnering can be risky, and, perhaps, it is not a situation for all companies.

The authors suggest several guidelines, based on previous research, which will facilitate a successful alliance between customer and supplier: (1) customize your partnership, (2) get top-down and bottom-up support, (3) organize cross-functional teams, (4) explore and prioritize, and (5) avoid pitfalls.

Examples of successful partnerships between companies are discussed.

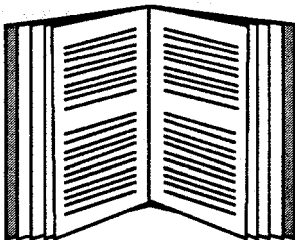
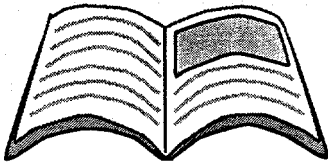
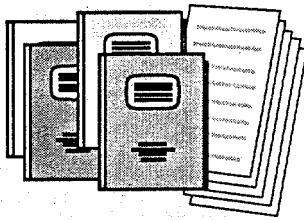


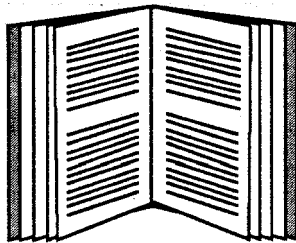
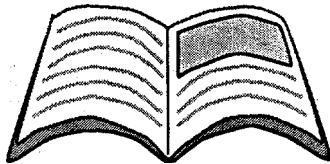
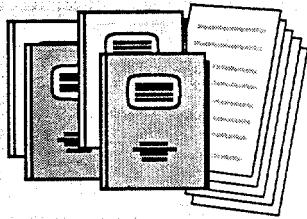
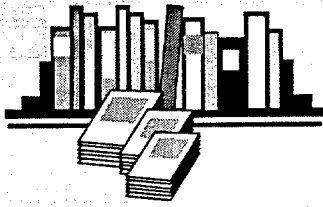


Ulrich, D. (Summer 1989). Tie the corporate knot: Gaining complete customer commitment *Sloan Management Review*, 30(4), 19-27.

Key words: Customer-supplier relationship, customer feedback, customer satisfaction, customer commitment

Abstract: The concepts of customer satisfaction and customer commitment are explored. This paper suggests that companies can achieve a strong, sustained relationship with their customers by involving them in their human resources practices.





Section 2

Description of Techniques

How to measure customer-supplier quality perceptions? The authors in this section offer a variety of guidelines in response to this question. Using AT&T as the research organization, Donnell and Dellinger (1990) and Leger, Ackerman, Coleman, and MacDorman (1987) present the most detailed step-by-step guides for assessing customer-supplier quality relationships. Cannie and Caplin (1991) as well as Albrecht and Bradford (1990) provide practical procedures or guidelines, based upon their consulting and research work in a number of service organizations, to improve service quality.

Albrecht, K., & Bradford, L. L. (1990). *The service advantage--how to identify and fulfill customer needs.* Homewood, IL: Dow Jones-Irwin.

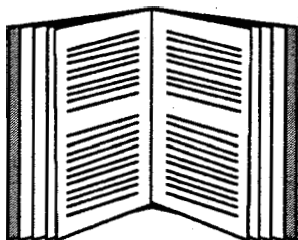
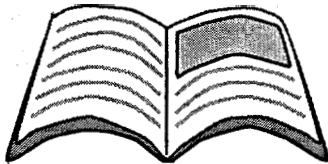
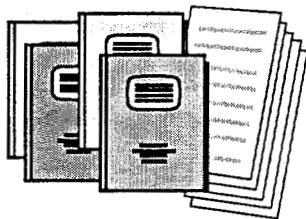
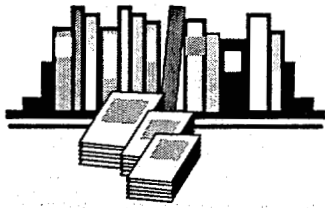
Key words: Service quality, customer feedback, customer satisfaction, customer needs

Abstract: This book is the latest in a series of books (Albrecht, 1988; Albrecht & Zemke, 1985) by the first author devoted to improving service quality. This book, unlike the others in the series, gives the reader practical procedures or guidelines to use for implementing a useful service management program. The fulcrum of the authors' program rests upon their Service Triangle model. The Service Triangle consists of four interrelated parts: the customer, the service strategy, the people, and the systems. This book focuses on the central aspect of the triangle, the customer.

The customer is perceived to have several points of contact with the services or products provided a company. Each point of customer contact or moment of truth is critical for the company.

A moment of truth is that precise instant when the customer comes into contact with any aspect of your business and on the basis of that contact, forms an opinion about the quality of your service and potentially, the quality of your product.

Several methodologies are introduced by the authors to measure the impact of customers' moments of truth upon the company, including, but not limited to, constructing a report card or rating typology about customers' overall company and specific services or products perceptions.



The authors leave you with the conclusion that the customer is not a static target. **As** a result, measurement of a customer's moments of truth must be continuous. They recommend that companies should establish a Service Quality Measurement System (SQMS).

You need the SQMS not only to stay in touch with the perceptions of your customers, but also as a means of informing employees and managers just how well they are performing in their efforts to deliver quality service. *Also*, you'll need solid, quantitative data to support performance appraisals of those responsible for the delivery of superior service. Middle managers and supervisors need tangible feedback from customers so they can coach and encourage their employees in areas that need improvement.

Band, W. (January 1988). How to measure customer satisfaction. *Sales and Marketing Management in Canada*, 31(1), 24-26.

Key words: Customer satisfaction, customer satisfaction measurement, customer satisfaction program

Abstract: This article presents a framework to design and implement a customer satisfaction program. **Band** suggests the following steps

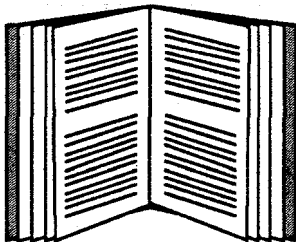
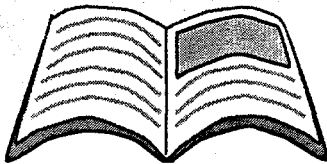
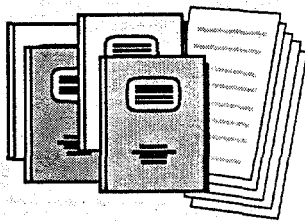
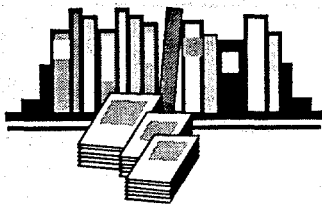
(1) Defining customer satisfaction issues and criteria. (2) Validating key customer satisfaction criteria, usually through a broad-based customer survey. (3) Devising indicators which can be linked to the customer satisfaction criteria defined in previous steps. (4) Developing data collection and analysis techniques. (5) Developing a data communication plan.

An overview of possible customer satisfaction predictors are discussed.

Blume, E. R. (September 1988). Customer service: Giving companies the competitive edge. *Training and Development Journal*, 42(9), 24-32.

Key words: Customer service, customer satisfaction, service quality

Abstract: Blume asserts that:



In the past few years, American companies have turned to customer service as a way to create a competitive edge. A crowded market, global competition, little difference in prices, and no difference (as perceived by the customer) in product quality have made companies look for ways to differentiate their products or services from the rest of the market. The customer, also, has become pickier for the simple reason that he or she has more from which to choose.

He contends that a good customer service program, that goes beyond acceptable customer satisfaction, is a must for a competitive company. Several tips or guidelines for a successful customer service program are suggested: (1) get top management support, (2) define customer service, (3) involve middle managers, (4) survey customers, (5) involve employees, (6) measure or evaluate current company service standards, (7) sponsor individual initiative, (8) hire quality employees, and (9) continuously seek improvement.

The article overviews several companies that are using the guidelines in their organizations: Matsushita Electronics of America, TRW's Information Services Division in California, American Transtech in Florida, and Budget Rent-A-Car in Illinois. However, the author concludes that there is no one best way to augment or realize the full potential of a company's customer service effort.

Brache, A. P., & Rummier, G. A. (October 1988). The three levels of quality. *Quality Progress*, 21(10), 46-51.

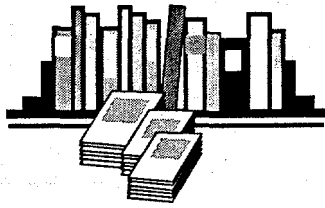
Key words: Quality improvement, customer requirements

Abstract: This article presents the view that an organization's quality requirements are its customers' quality requirements, and it discusses a framework to identify and use customers' requirements for quality improvement.

Cannie, J. K., & Caplin, D. (1991). *Keeping customers for life*. New York: American Management Association.

Key words: Customer requirements, customer focus, service quality, market research, customer satisfaction, customer survey

Abstract: This book is basically a handbook representing the author's 12-step strategy to implement a customer-driven service process for any type of company. The book contains numerous application examples, survey and interview formats, self-rating



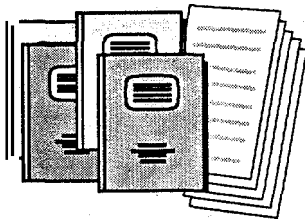
forms, and general worksheets. It is divided into two major parts and 17 subsections.

Cornish, F. (June 1988). Building a customer-oriented organization. *Long Range Planning*, 21(3), 105-107.

Key words: Service quality, customer feedback

Abstract: The author recognizes the "key long-term competitive advantage between suppliers in service quality. Whilst price is an important element in the sales equation, it is not the sole determinate, and although technology and productivity provide a company with advantages, sooner or later competitors catch up."

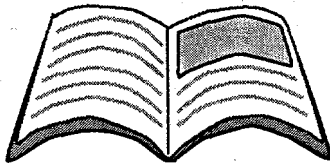
In the article, the author describes his successful steps to implement a service quality program in his British-based financial institution.



Desatnick, R. L. (March 1987). Building the customer-oriented work force. *Training and Development Journal*, 41(3), 72-74.

Key words: Customer orientation, employee training

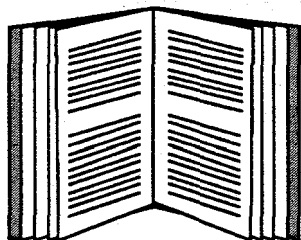
Abstract: This article describes the characteristics of a successful employee orientation process for instilling total customer commitment.



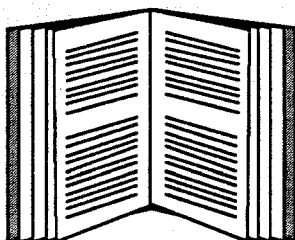
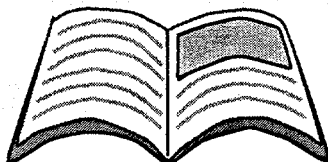
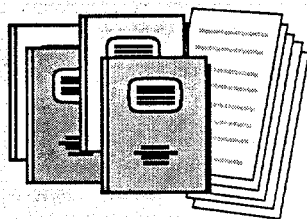
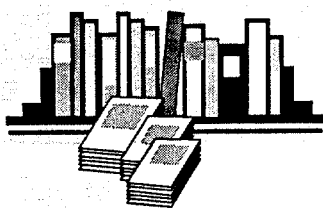
Donnell, A., & Dellinger, M. (1990). *Analyzing business process data: The looking glass*. Piscataway, NJ: AT&T Bell Laboratories Technical Publications Center.

Key words: Customer requirements, customer satisfaction, process improvement, business process, supplier

Abstract: The methods suggested by the authors draw upon extensive research and practice by AT&T, as well as from other companies.



This book is for anyone working to manage and improve a business operation or service. It teaches a way of thinking--a strategy for collecting and analyzing data to improve the efficiency of a business process and to increase customer satisfaction. Use it **as** a companion . . . to any quality improvement methodology. The data analysis strategy and skills taught here, used with the Customer-Supplier Model, will help you understand, control, and improve the ability of your process to deliver what customers want and expect.



Goodman, J. A., Malech, A. R., Bargatze, G. F., & Ledbetter, C. (Winter 1988-89). Converting a desire for quality service into actions with measurable impact. *Journal of Retail Banking*, 10(4), 14-22.

Key words: Customer service, service quality, customer satisfaction

Abstract: This article suggests a proven action plan to reduce unnecessary service expense and produce measurable improvements in customer satisfaction.

Kukla, B. (June 1986). Meeting customer needs. *Quality Progress*, 19(6), 15-18.

Key words: Customer needs, customer satisfaction

Abstract: A program to identify, measure, and implement customers' requirements is described.

Leger, E., Ackerman, R., Coleman, R., & MacDorman, J. (1987). *Process quality, management, and improvement guidelines*. Piscataway, NJ: AT&T Bell Laboratories Technical Publications Center.

Key words: Customer requirements, customer needs analysis, process improvement, quality planning tools, graphic tools, business management

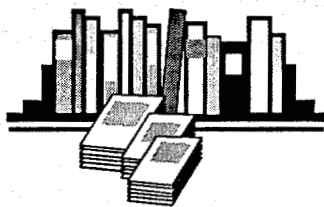
Abstract: AT&T has published several books, which are part of its AT&T Quality Library. This book **has** proven to be its most popular. It describes a proven method, based upon AT&T's Customer-Supplier Model, to manage, control, and improve any business process. General guidelines from a management responsibility matrix to identifying customer requirements, to improving the process quality are presented.

The Appendix contains descriptive information and examples of process management and improvement tools.

Reid, P. P., Jr., & Hermann, M. R. (December 1989). *QFD ...the voice of the customer. Journal for Quality and Participation*, 44-46.

Key words: Quality function deployment, customer requirements

Abstract: Quality function deployment (QFD) aids in the understanding of the quality improvement process by demonstrating the step-by-step process that turns customer requirements into

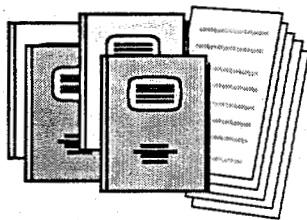


quality improvements. This article presents a brief description of the QFD process.

Ross, P. J. (June 1988). The role of Taguchi methods and design of experiments in QFD. *Quality Progress*, 21(6), 41-47.

Key words: Taguchi methods, quality function deployment

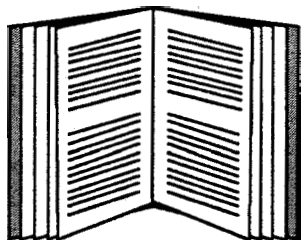
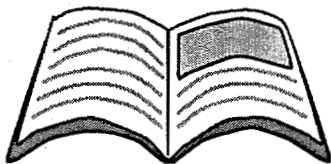
Abstract: Taguchi Methods and QFD are complementary tools. QFD can help identify key product or process concerns with respect to customer requirements. Taguchi Methods can help identify what product or process relationships actually exist.

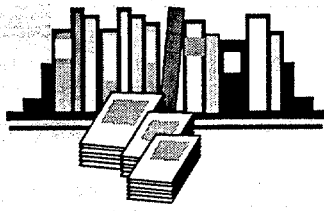


Sellers, P. (June 1990). What customers really want *Fortune*, 121, 58-68.

Key words: Customer service, customer satisfaction

Abstract: Customers expect above average service. Companies that wish to differentiate themselves from their competitors know this. This article discusses the cycles of good service and poor service, and their possible implications for different businesses.

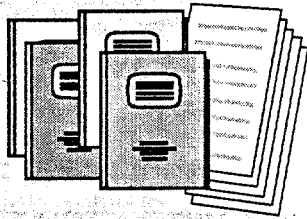




Section 3

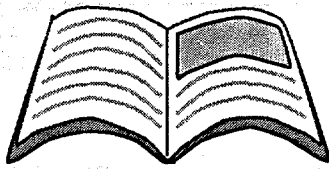
Empirical Analyses

Section 3 includes materials to quantify customers-suppliers quality perceptions. Zeithaml, Parasuraman, and Berry (1990) present the most long-term research in this area. Their research has identified five general criteria or dimensions that underlay customers' determinants of service quality. According to the authors, the primary way to deliver high-quality service on any given dimension is to balance customers' expectations and perceptions of actual service and close the gaps between the two. Articles by Brown and Swartz (1989) and Bolton and Drew (1991) extend Zeithaml et al.'s research into other service-sector organizations.

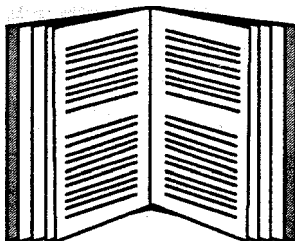


Bohl, D. L., Greenberg, E. R., Skagen, A. E., DeBow, Y., & Kraut, D. (1987). *Close to the Customer: An American Management Association research report on consumer affairs*. New York: American Management Association.

Key words: Consumer survey, consumer satisfaction, consumer affairs department



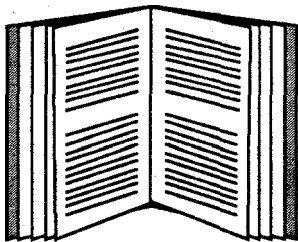
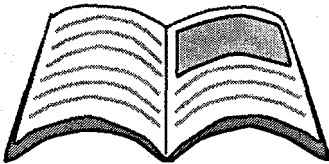
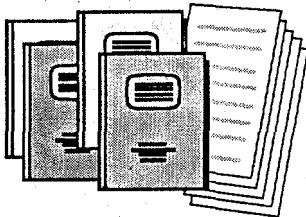
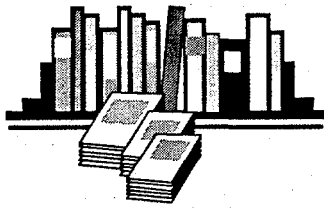
Abstract: This report describes the descriptive findings of a survey of 267 respondents from both the membership lists of **AMA** and the Society for Consumer Affairs Professionals (SOCAP), a Washington, DC based association of specialists in the field. The survey's overall objective is to find out how companies from different industries solicit and use information from their customers. More specifically, the survey addresses the following questions: (1) How do companies gather information from their customers? (2) What seems to work best? (3) Where does that information go? (4) Who in the organization gets it? (5) What do we do about it? and (6) What might it all add up to?



The survey comprises seven distinct sections: (1) Tactics and Ratings, (2) Consumer Affairs Department, (3) Internal Measures, (4) Customer Service, (5) Sales Force Training and Tactics, (6) What the Numbers Can't Tell, and (7) Identify the Leading Companies in Your Industry.

The data analysis reveals several interesting insights about high-growth, successful companies, and close-to-the-customer orientation:

1. High-growth companies tend to integrate customer data into their strategic plans.



2. They spend more money on customer information channels, about **20** percent more on employees, and almost twice as much on contracted services and overhead.
3. They are significantly more vocal in talking about what works for them.
4. They have excellent customer profiles.
5. High-growth companies have developed structured, formal systems to monitor complaints, standards for response time, and networks to get the information to the people who can act upon it.

Case studies of our high-growth companies are presented: The Goodyear Tire & Rubber Company, Proctor & Gamble, Benetton and New York State Electric & Gas.

Bolton, R. N., & Drew, J. H. (March 1991). A multistage model of customers' assessments of service quality and value. *Journal of Consumer Research*, 17, 375-384.

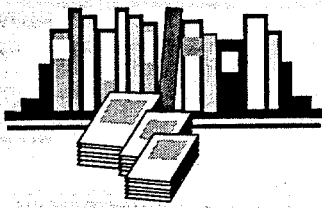
Key words: Service quality, customer satisfaction, customer expectations

Abstract: his article presents a model of how customers with prior experiences and expectations assess service performance levels, overall service quality and service value.

More specifically, the authors state:

This study explores how customers integrate their perceptions of a service to form an overall evaluation of that service. It differs from prior research concerning service quality in two ways. First, it develops a multistage model of the determinants of perceived service quality and service value. Second, it describes how customers' expectations, perceptions of current performance, and disconfirmation experiences affect their satisfaction with a service, which in turn affects their assessment of service quality and value.

Using survey data from a national probability sample of 1,408 residential telephone subscribers in 1985 to explore their model, the authors conclude that: (1) Consistent with prior service quality research, the gap between performance and expectations is the key determinant of overall service quality. (2) There is a positive relationship between customers' assessments of service value and service quality. (3) Customers' background characteristics

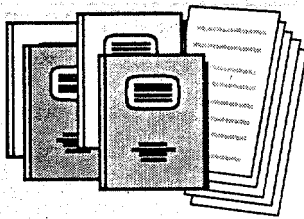


(e.g., age, income, business, etc.) are more important in assessing value, but not quality.

Brown, J. (April 1988). Shopper evaluations provide added dimension. *Bank Marketing*, 21(4), 22-25.

Key words: Customer surveys, performance evaluation

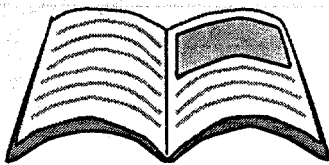
Abstract: A process to evaluate tellers' performance using customer (shopper) input is discussed. Rated performance dimensions include customer service skills, appearance, product knowledge, sales effort, and efficient operational procedures.



Brown, S. W., & Swartz, T. A. (April 1989). A gap analysis of professional service quality. *Journal of Marketing*, 53, 92-98.

Key words: Customer service, gap analysis, service quality

Abstract: Using medical services as the main study site, this article explores the concept of professional services quality and its evaluation from both the provider and client perspectives.

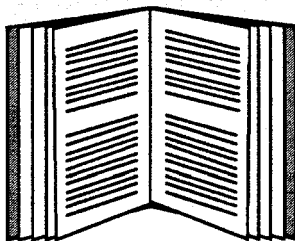


The authors' conclude that "Examination of the perceptions of both parties in an exchange is a way to identify gaps in expectations and experiences. Once inconsistencies have been identified, strategies and tactics for achieving more congruent expectations and experiences can be initiated. Compatible expectations and experiences can be achieved by altering the provider's behavior and expectations and/or by altering the client's expectations and experiences. Greater consistency, in turn, leads to a more positive service encounter and enhances the likelihood that the experience will evolve into a longer term client-provider relationship."

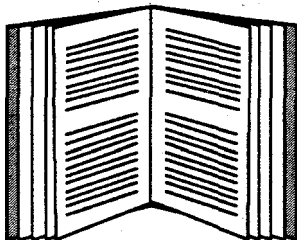
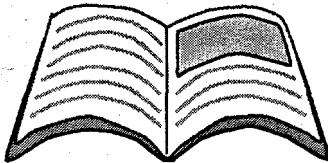
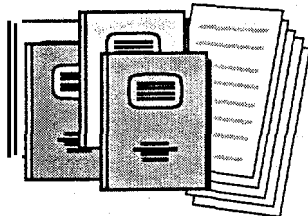
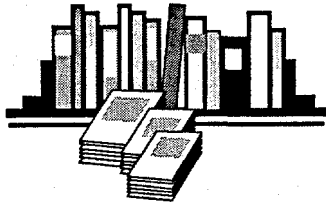
Heide, J. B., & John, G. (February 1990). Alliances in industrial purchasing: The determinants of joint action in buyer-supplier relationships. *Journal of Marketing Research*, 27(2), 24-36.

Key words: Customer-supplier relationship

Abstract: This article develops a theoretical model of industrial buyer-supplier links that suggests joint action as a key aspect of closeness. Indicators of joint action are empirically measured and discussed.



The authors point out that:



The implications of our study are viewed best within the context of practice-oriented reporting about the trends toward closer buyer-supplier ties. Almost without exception, such reporting tends to view closer relationships as a universally desirable idea. Contrast this notion with our model.

The basic postulate in our work is that bilateral governance is not universally desirable. It is useful only when specific assets and uncertainty evoke a need to protect and to adapt. In the absence of such needs, joint action does not have beneficial effects and, given the costs associated with shifts away from market governance, it is likely to be detrimental to performance. At the very least, our study should serve as a cautionary tale about the conditions that evoke the need to craft closer ties with suppliers.

Henderson, J. C. (Spring 1990). Plugging into strategic partnerships: The critical IS connection. *Sloan Management Review*, 31(3), 7-18.

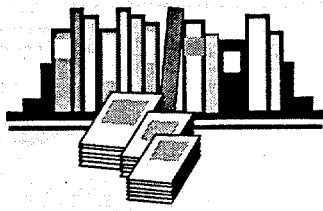
Key words Customer-supplier relationship, partnerships

Abstract: The paper presents the results of research that provide a framework to develop a descriptive model of partnerships. The term partnerships was operationalized to be:

... a general management strategy. ... is used to describe a working relationship that reflects long-term commitment, a sense of mutual cooperation, shared risk and benefits and other qualities consistent with concepts and theories of participatory decision making.

Two dimensions of partnership-style relationships are explored within the model. Partnership in context (PIC), which is defined as the degree to which the partners believe the partnership will be sustained over time. ... Partnership in action (PIA) is defined as the ability of partners to influence policies and decisions that affect the operational performance of the partnership.

The model is based upon 28 interviews with senior line executives managing external or internal customer-supplier information systems relationships.



Heskett, J. L., Sasser, W. E., Jr., & Hart, C. W. L. (1990). *Service breakthroughs: Changing the rules of the game*. New York: The Free Press.

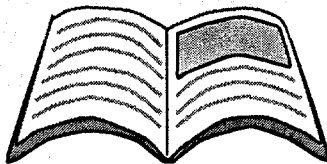
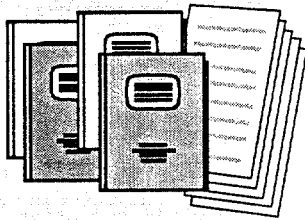
Key words: Service quality, customer satisfaction, customer service

Abstract: The main objectives of this book are to:

(1) identify elements common to methods that successful service firms adopt for activating strategies, (2) examine the implications that these methods have for the long-term benefits to servers as well as the served, and (3) suggest ways in which service-producing companies can avoid the mistakes of the industrial revolution as they bring modern technology to bear in creating a service revolution.

Four basic conclusions are drawn by the authors:

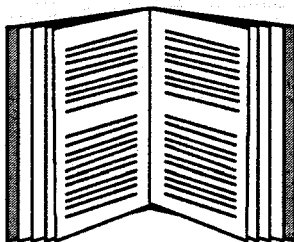
(1) service quality is a positive force for attracting and retaining both the most desirable customers and employees, leading directly to superior productivity, (2) the starting point for the upgrading of quality is the measurement of costs and benefits, (3) nothing less than total customer (and employee) satisfaction should be the goal, and (4) the task is complex and never-ending.

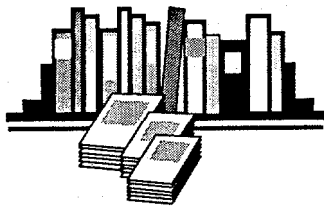


Khan, S. (June 1990). A practical approach to a quality customer focus. *The Journal for Quality and Participation*, 86-90.

Key words: Customer needs, customer satisfaction, survey methods

Abstract: Khan's article addresses the following question: What is the best method to obtain meaningful, reliable and verifiable data to identify customer needs, wants, and expectations in the current turbulent business environment? The author suggests that a systematic process, based upon a scientific research model, is the only method to answer this question. One such model or method proposed and discussed by Khan is the construction and conduction of a customer survey. He suggests some very simplified questions that should be considered prior to implementing the customer survey program. A sample customer survey is exhibited in the article.

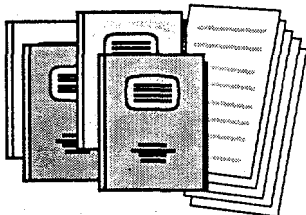




Kremin, L. A. (Autumn 1986). Improving the quality of banking services. *National Productivity Review*, 5(4), 325-337.

Key words: Quality, customer perceptions

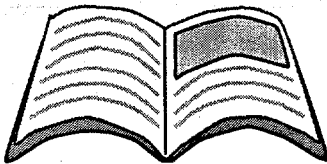
Abstract: The purpose of this article is to provide bankers and managers in other financial institutions the basic framework they need to construct an effective effort to raise the quality of services they provide.



Morris, P. A. E., & Birdwell, R. J. (1988). *Development of an instrument for measuring and analyzing client satisfaction for Navy Regional Data Automation Centers (NARDACs)* (Master's Thesis). Naval Postgraduate School. Available from Nancy C. Roberts, Naval Postgraduate School. Phone (408) 646-2742.

Key words: Customer satisfaction, customer satisfaction measurement

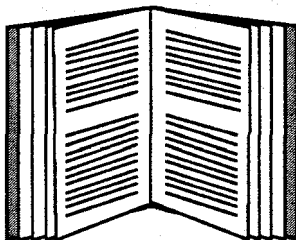
Abstract: Client satisfaction is considered to be a critical indicator of the effectiveness of the services provided by NARDACs. The authors used standard methodological procedures to construct a client satisfaction survey.



Ryan, J. (December 1988). Consumers see little change in product quality. *Quality Progress*, 21(12), 16-20.

Key words: Consumer research, customer satisfaction

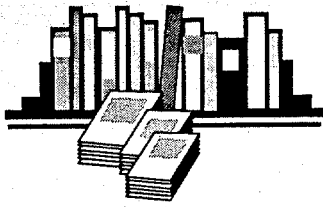
Abstract: This American Society for Quality Control (ASQC)/Gallup survey of adult Americans includes expanded coverage of service quality issues in government activities. Plus an extra look at the role of quality in the purchase decision and a variety of customer satisfaction topics are addressed.



Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. New York: The Free Press.

Key words: Service quality, customer satisfaction, customer expectations, consumer research

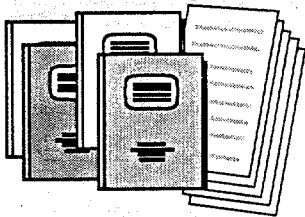
Abstract: The authors summarize and elaborate the previous research on service quality presented in their earlier works. Emphasized in this book are the authors' specific objectives:



... to attack head-on the mystique, mush, and myths that surround the service-quality issue and limit progress; to offer a framework that managers can actually use to understand and improve service quality; to offer specific and practical guidelines for improving service; and to convey the sense of urgency that we feel about improving the service quality in America.

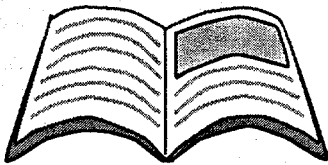
Also emphasized in this book is the authors' attempt to go beyond formal research findings by presenting accumulated company case histories, quotes and ideas.

Zemke, R., & Anderson, K. (February 1990). Customers from hell. *Training*, 25-34.

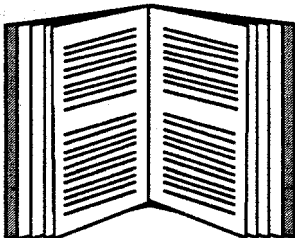


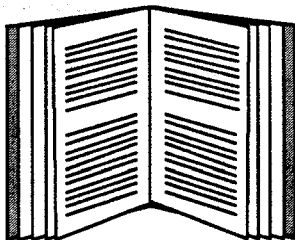
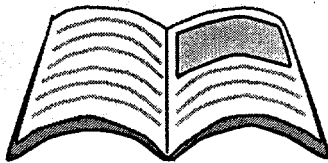
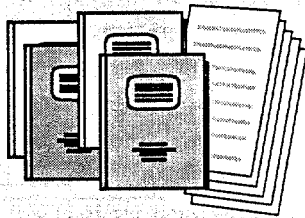
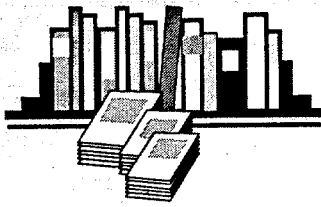
Key words: Customer complaints, customer satisfaction

Abstract: "Treat the customer like a King" is the standard rule for employees in a service-oriented business environment. The "customer is always right" is another business axiom. **As** the authors point out, however, research shows that approximately **30** percent of product and service problems reported to companies result from customer errors or product misuse. Unfortunately, this group of customers is the most difficult to reason with.



Zemke and Anderson conducted a series of focus group interviews with front-line service employees in a variety of jobs (e.g., repair people, retail sales associates, customer service specialists, telemarketers, etc.) and asked about their most difficult customers. From the interview data, the authors developed five amusing, if not factual, profiles of difficult customers. Strategies or tactics to deal with difficult customers are suggested.





Section 4

Case Studies

Section 4 includes case studies from public- and private-sector organizations that have implemented strategies and techniques to improve customer-supplier relationships, and, in turn, service quality. Sepulcher (1988) presents an excellent overview of American organizations that are taking the lead in improving service quality.

Bemused, K. (September 1988). People: The only thing that will make quality work. *Quality*, 27, 63-67.

Key words: Employee suggestions, problem solutions, process improvement

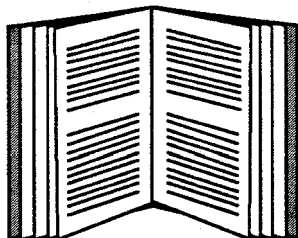
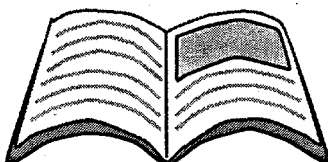
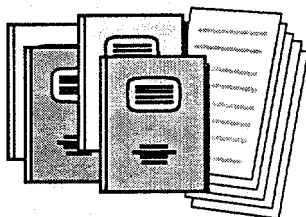
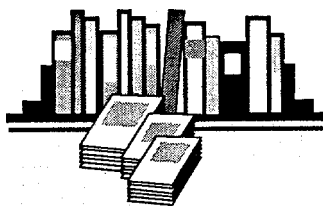
Abstract: This article describes the evolution and outcome of a quality program in a chemical company. The core objectives of the program are to solicit design, technical and implementation feedback from both internal employees and external users of the company's products.

Berry, L. L., Parasuraman, A., & Zeithaml, V. A. (September-October 1988). The service-quality puzzle. *Business Horizons*, 31(5), 35-43.

Key words: Service quality, customer expectations

Abstract: This article presents findings from the authors' ongoing study of service quality. Their work consists of two phases. Phase 1 was "qualitative and focused on how both customers and service firm executives perceive and evaluate service quality." To learn about customers' views on service quality, they conducted 12 focus-group interviews, three for each of four selected services: retail banking, credit cards, securities brokerage, and appliance repair and maintenance. Service-firm executives information was assessed by conducting in-depth face-to-face interviews with marketing, operations, and customer-relations executives in each of four nationally known companies. This phase of the research revealed that:

Customers evaluate service quality by mentally comparing their perceptions of delivered services with their expectations of the service firms. They do this along ten distinct dimensions (reliability, responsiveness, competence, access,



courtesy, communication, credibility, security, understanding/knowing the customer and tangibles). This inquiry also revealed key gaps within service firms (such as the inability of customer-contact personnel to meet service-quality specifications laid down by management) that could have a bearing on service quality as perceived by customers.

Phase 2 focused on two objectives: (1) developing a valid and reliable survey instrument to measure customer perceptions of service quality, and (2) understanding and correcting the factors that impair service quality. A 22-item questionnaire, covering five dimensions of service quality (tangibles, reliability, responsiveness, assurance, and empathy) satisfied the first objective. The second objective was fulfilled by the development of a structured questionnaire given to employees in a national known bank.

In this article, the authors present and discuss a case study in the banking industry to demonstrate and explore their previous research. The final statement asserted by the authors is that:

Quality of service is more than a set of activities; it is, in the final analysis, primarily an attitude. Only leaders who insist upon service quality and are obsessed with it will stay the course through the pitfalls, the short-term financial pressures, and the discouragement, and succeed in meeting customers' expectations.

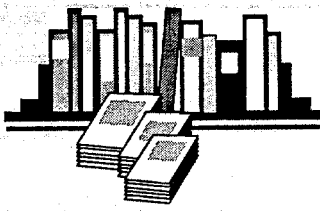
Brooks, G., & Linklater, J. R. (Summer 1986). Statistical thinking and W. Edwards Deming's teaching in the administrative environment. *National Productivity Review*, 5(3), 271-278.

Key words: Statistical process control, continuous improvement, teamwork

Abstract: Windsor Export Supply (WES), a subsidiary of the Ford Motor Company, applies statistical principles in the administrative/office environment. This article describes WES's experience using this approach.

Burstein, C., & Sedlak, K. (Spring 1988). The federal productivity improvement effort: Current status and future agenda. *National Productivity Review*, 7(2), 122-138.

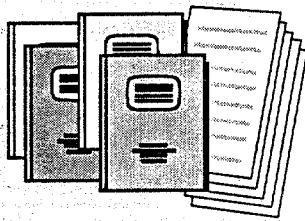
Key words: Total quality management, implementation, customer focus



Abstract: This article attempts to assess the progress of federal government activities on a number of qualitative and quantitative indicators.

Cawsey, R. A. (1986). Quality improvement after deployment. *Proceedings of the National Electronics Conference*, 40(1), 43-47.

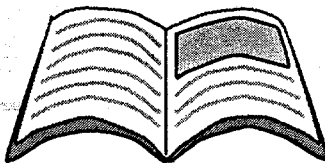
Key words: Customer satisfaction, customer quality characteristics, cost of quality



Abstract: This presentation describes a program that takes into account the customer-perceived quality characteristics of a product or service. Improvement in the level of customer satisfaction and its relationship to the cost of quality is also examined.

Clark, H. J. (1989). *Total quality management: An application in a research and development laboratory* (AFHRL Tech. Paper 89-58). San Antonio, TX: Air Force Human Resources Laboratory.

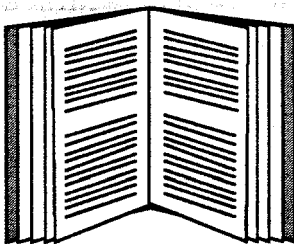
Key words: Total quality management, customer requirements



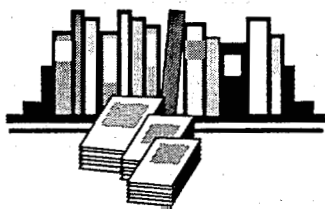
Abstract: Method for Generating Efficiency and Effectiveness Measures (MGEEM) is used for TQM implementation in a USAF laboratory. This report outlines the implementation procedures and lessons learned.

Cohen, L. (Summer 1988). Quality function deployment: An application perspective from Digital Equipment Corporation. *National Productivity Review*, 7(3), 197-208.

Key words: Quality function deployment, customer requirements, product design



Abstract: Cohen describes how Quality Function Deployment (QFD) methodology is successfully applied at Digital Equipment Corporation. He concludes that QFD is rapidly becoming accepted at his company for several reasons: (1) Compared to other product planning processes, QFD appears more efficient. (2) QFD provides you with a step-by-step process. (3) QFD forces you to make an analysis of the interrelationships of features and customer needs. (4) QFD participants, because of the nature of the method are forced to arrive at a common group vision. (5) The QFD methods forces you to construct an archive of the process you are working on.

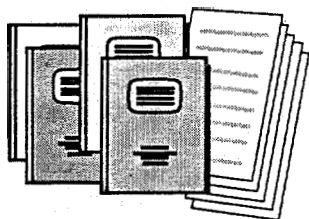


Cohen, M. A., & Lee, H. L. (Winter 1990). Out of touch with customer needs? Spare parts and after sales service. *Sloan Management Review*, 31(2), 55-66.

Key words: Customer needs, customer satisfaction, service quality

Abstract: Providing adequate sales service is a key ingredient of product quality and thus of competitive success. Competitive success ultimately depends on customer satisfaction. This article explores spare parts inventory management in after sales delivery. Two case studies are discussed.

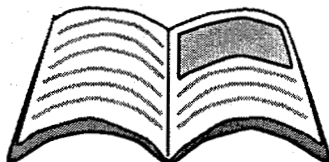
"The case studies indicate that it is indeed feasible for multi-echelon stock control systems to support the delivery of cost effective, segment differentiated after sales service."



Delatore, J. P., Prell, E. M., & Vora, M. K. (January 1989). Translating customer needs into product specifications. *Quality Progress*, 22(1), 50-53.

Key words: Product design, customer needs

Abstract: A method used by systems engineers at AT&T Bell Laboratories to translate customer needs into product requirements is presented. Designers use these requirements to design software and hardware.



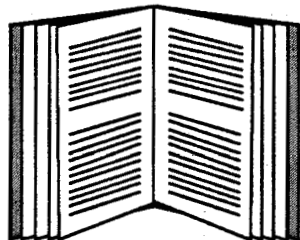
De Vera, D., Glennon, T, Kenny, A. A., Khan, M. A. H. & Mayer, M. (June 1988). An automotive case study. *Quality Progress*, 21(6), 35-38.

Key words: Quality function deployment, customer needs, planning tools

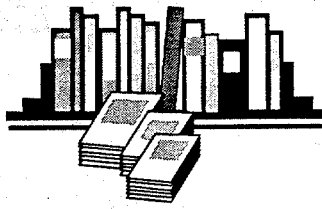
Abstract: Quality Function Development (QFD) is described and used.

Kohoutek, H. J. (1988). Coupling quality assurance programs to marketing. *Industrial Marketing Management*, 17(3), 177-188.

Key words: Customer expectation, market research, quality assurance



Abstract: The idea of close cooperation among customers, expectations, market trends, and quality assurance programs currently goes beyond the traditional understanding of their roles. This article describes the computer industry's need for this partnership,



the opportunities it opens, and the practical experience gained at Hewlett-Packard's Fort Collins Systems Division.

Meadows, R. A., Beckerman, L. P., & Richards, C. (January-February 1990). Systems engineering: The key to TQM. *Program Manager*, 19(1), 2-6.

Key words: Systems engineering, customer needs

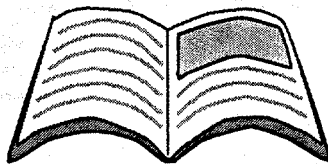
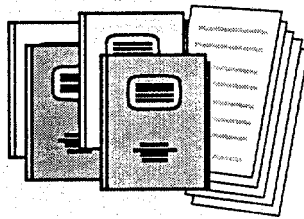
Abstract: A system engineering approach to implement a specific TQM project is presented.

Rice, F. (December 1990). How to deal with tougher customers, *Fortune*, 122, 38-48.

Key words: Consumer preferences, customer expectations

Abstract: Rice presents a profile of the 1990 U.S. consumers as demanding, inquisitive, and discriminating. They are: (1) willing to pay a premium for quality products and services, (2) concerned about nutrition and ingredients in their food, (3) worried that their disposable society is ruining their environment, and (4) in general, no longer trust manufacturers.

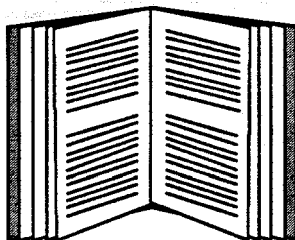
This article contains commercially useful examples of how American manufacturers are responding to consumers' preferences.

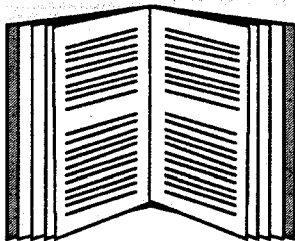
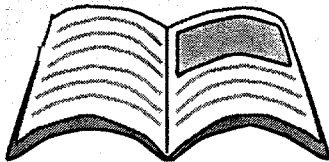
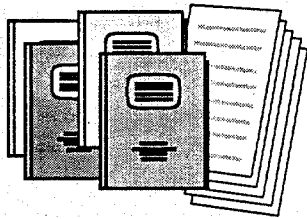
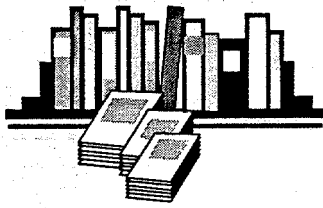


Spechler, J. W. (1988). *When America does it right: Case studies in service quality*. Norcross, GA: Industrial Engineering and Management Press Institute of Industrial Engineers.

Key words: Customer service, service quality, customer satisfaction, customer feedback, quality, marketing research

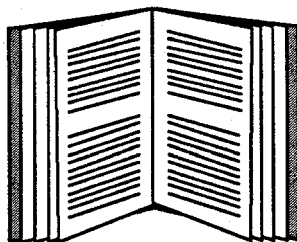
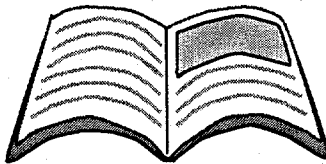
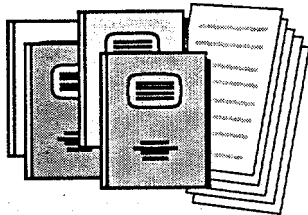
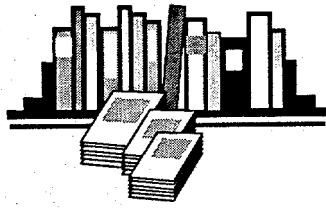
Abstract: Case studies in service quality excellence that represent the best U.S. companies are presented. Spechler identifies and discusses several key common success factors and strategies across the various quality companies. Success factors include: (1) strategy, (2) technology, (3) measurement, (4) feedback, (5) organization, and (6) training. And, key approaches or strategies to make quality work are: (1) belief systems that emphasize quality, (2) marketing service quality, (3) implementing vendor or supplier quality assurance programs, and (4) communicating to the work force that productivity and quality are mutually complementary goals.



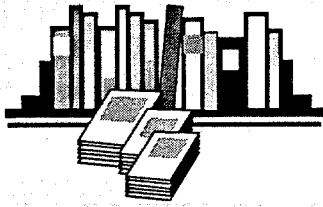


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